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EXAMINER

HOSSAIN, TANIM M

ART UNIT PAPER NUMBER

2145

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/838,135

Applicant(s)

SUORSA, ET AL

Examiner

Tanim Hossain

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 5-9, 12-15, 58, 59, and 61 are rejected under 35 U.S.C. 102(e) as being anticipated by Spencer (U.S. 6,633,907).

As per claim 1, Spencer teaches a method for automated provisioning of computer networks, comprising the steps of: receiving at least one command to be executed on a network device (column 8, lines 38-57; column 9, lines 16-62); reading parameters from a network database related to said network device column 8, lines 38-57; column 9, lines 16-62); determining whether the at least one command can be properly executed on said network device based on the parameters read (column 9, lines 16-62); and executing the at least one command on said network device only if it is determined that the at least one command can be properly executed (column 9, lines 16-62).

As per claim 2, Spencer teaches the method of claim 1, wherein the at least one command is executed by an agent on said network device (column 9, lines 16-62).

As per claim 5, Spencer teaches the method of claim 4, wherein the step of verifying is accomplished by way of communicating with a communication gateway of the secure provisioning network (figure 2; column 3, lines 52-54; where the communication gateway is read as the master object, which, in the figure is in contact with the SCOs, user pages, and data stores. It is the point of contact, thus constituting a communication gateway.).

As per claim 6, Spencer teaches the method of claim 1, wherein the step of determining is based on reading software packaging parameters (figures 2, 3; column 2, lines 7-12; where the figures show different types of services, or packages, being provisioned, and the SCOs provisioning their own online service implies a determining process by package, where certain parameters would lead to certain services being provisioned.).

As per claim 7, Spencer teaches the method of claim 6, wherein the software packaging parameters comprise compatibility requirements (column 4, lines 10-21; where the existence of distinct software packages to be provisioned implies the existence of compatibility requirements. Compatible SCOs must be used to provision the appropriate service.).

As per claim 8, Spencer teaches the method of claim 6, wherein the software packaging parameters comprise software roles (column 4, lines 10-21; where the different services constitute different software roles.).

As per claim 9, Spencer teaches the method of claim 7, wherein the compatibility requirements comprise software roles' compatibility requirements (column 4, lines 10-21; where the different services, or software roles, inherently possess compatibility requirements, as evidenced by the use of different SCOs for different services.). °

As per claim 12, Spencer teaches the method of claim 6, wherein the software packaging parameters comprise parameters regarding specific customer account requirements (column 4, lines 10-11).

As per claim 13, Spencer teaches the method of claim 7, wherein the compatibility requirements comprise requirements regarding specific customer account compatibility (column 4, lines 12-16; column 3, lines 48-50; where the user chooses which services are needed, and the master object determines whether the user is allowed access, thus constituting compatibility.).

As per claim 14, Spencer teaches the method of claim 8, wherein the software roles comprise customer account software roles (column 4, lines 10-21; where the customer account governs which roles are provisioned).

As per claim 15, Spencer teaches the method of claim 9, wherein the software roles compatibility requirements comprise account software roles compatibility requirements (column 4, lines 10-21; where the customer chooses which software roles are required to be provisioned).

As per claim 58, Spencer teaches the method of claim 1, wherein the step of executing the at least one command is limited to entities having an approved access level to execute the at least one command (column 2, lines 4-6).

As per claim 59, Spencer teaches the method of claim 58, wherein the access to execute the at least one command is defined in an access control list (column 3, lines 43-50; where the denial of certain users to access back-end servers implies the use of an access control list).

As per claim 61, Spencer teaches the method of claim 58, wherein the entity executing the at least one command comprises an agent (column 3, lines 43-54; where the SCO is the agent, and its access level is approved by the master object).

Claim Rejections - 35 USC § 103

Claims 4, 10, 11, 16-57, 60, and 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spencer.

As per claim 4, Spencer teaches the method of claim 1, further comprising the steps of: receiving a message that at least one command is to be executed from a secure provisioning network (column 9, lines 16-62). Spencer does not specifically teach the requesting of verification of the validity of the message. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a method to request the validity of a command message. When commands are given, it must be certain that these commands are coming from the correct place, so as to prevent fraudulent rollbacks or configurations. Including a specific verification scheme would prevent against undue rollbacks and faulty configurations. Including a security measure constitutes a design choice and therefore does not constitute a patentable distinction.

As per claim 10, Spencer teaches the method of claim 6, but does not specifically teach the use of operating system parameters as software packaging parameters. It would have been obvious to one of ordinary skill in the art to include operating system parameters as packaging parameters at the time of the invention, as it is well known in the art. The motivation for doing so is to allow for another type of parameter to be used to further classify the provisioning process.

As per claim 11, Spencer teaches the method of claim 7, but does not specifically teach the use of operating system compatibility requirements as compatibility requirements. It would

have been obvious to one of ordinary skill in the art to include OS compatibility requirements as compatibility requirements, as it is well known in the art. The motivation for doing so is to prevent the loading of incompatible operating systems, which would lead to inefficiency in the provisioning process.

As per claim 16, Spencer teaches the method of claim 6, but does not specifically teach the use of device parameters as software packaging parameters. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this limitation, as it is well known in the art. The motivation for doing so is to prevent incompatible devices from being loaded, which would lead to inefficiencies in the provisioning process.

As per claim 17, Spencer teaches the method of claim 16 on the basis of obviousness, but does not specifically teach the use of device interface parameters as device parameters. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this limitation, as it is well known in the art. The motivation for doing so is to allow for the compatibility of device interfaces to be a determining factor in the provisioning process, allowing for further efficiency.

As per claim 18, Spencer teaches the method of claim 17 on the basis of obviousness, but does not specifically teach the use of internet protocol address parameters as device interface parameters. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this limitation, as it is well known in the art. The motivation for doing so is to allow certain IP addresses to access specific provisioning services which are better suited to provision a certain IP address requesting a specific type of service. This allows for further efficiency in the provisioning process.

As per claim 19, Spencer teaches the method of claim 17 on the basis of obviousness but does not specifically teach the use of interface type parameters as interface parameters. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known in the art. The motivation for doing so is to prevent incompatible interface types from being used in the provisioning process. Interface types should be as efficient as possible, allowing for specific interfaces to correspond to specific services being provided. This allows for further efficiency in the provisioning process.

As per claim 20, Spencer teaches the method of claim 16 on the basis of obviousness but does not specifically teach the use of interface components parameters as device parameters. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known in the art. The motivation for doing so is to prevent the use of incompatible or disallowed interface components in the provisioning process. For the invention to function, compatible interface components must be used, or it will fail, so there must be a parameter in which only compatible interface components can be used.

As per claim 21, Spencer teaches the method of claim 16 on the basis of obviousness but does not specifically teach the use of memory components parameters as device parameters. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known. The motivation for doing so is to allow only those devices that meet certain memory requirements to be used in the provisioning process, adding to the invention's efficiency.

As per claim 22, Spencer teaches the method of claim 16 on the basis of obviousness but does not specifically teach the use of storage components parameters as device parameters. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well

known. The motivation for doing so is to allow only those devices that meet certain storage type requirements to be used in the provisioning process, adding to the invention's efficiency.

As per claim 23, Spencer teaches the method of claim 16 on the basis of obviousness, but does not specifically teach the use of central processing unit parameters as device parameters. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known. The motivation for doing so is to allow only CPUs that meet certain requirements to be used in the provisioning process, adding to the invention's efficiency.

As per claim 24, Spencer teaches the method of claim 7, but does not specifically teach the use of device compatibility requirements as compatibility requirements. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known. The motivation for doing so is to allow only devices that are compatible with the system to be used, since the invention will fail if incompatible devices are used.

As per claims 25-31, Spencer teaches the method of claim 24 on the basis of obviousness. These claims are rejected on the same bases as claims 17-23 respectively, as compatibility requirements are specificities of parameters used in the invention and obvious in the same manner.

As per claim 32, Spencer teaches the method of claim 8, but does not specifically teach the use of device roles compatibility requirements as software roles compatibility requirements. It would have been obvious to one of ordinary skill in the art to include this limitation. The motivation for doing so is the necessity of using devices compatible with software roles, which, in turn, must also be compatible with the system to be able to provide provisioning services. The invention would fail if these requirements were not met.

As per claim 33, Spencer teaches the method of claim 9, but does not specifically teach the use of device roles as software roles. It would have been obvious to one of ordinary skill in the art to include this limitation, since software roles necessitate the use of devices. The inclusion of device roles as software roles allows for a better system of grouping by certain characteristics, than if device roles were not included as a classification of software roles. The inclusion of this limitation makes for easier grouping of software roles, which can then be used as parameters.

As per claim 34, Spencer teaches the method of claim 6, but does not specifically teach the use of application packaging parameters as software packaging parameters. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known in the art. Application packaging parameters are merely specificities of software packaging parameters. For judging whether a command can be executed by software packaging parameters, application packaging parameters must be known, since they are a key part of software parameters.

As per claim 35, Spencer teaches the method of claim 7, but does not specifically teach the use of application compatibility requirements as compatibility requirements. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known. It is a necessity to have applications compatible with the system for the invention to have any type of utility, and thus the requirement of compatible applications is integral.

As per claim 36, Spencer teaches the method of claim 8, but does not specifically teach the use of application software roles as software roles. It would have been obvious to one of ordinary skill in the art to include this limitation, since application software roles are an

important part of software roles. The individual applications govern the characteristics of the software roles, so their inclusion as software roles is obvious.

As per claim 37, Spencer teaches the method of claim 36 on the basis of obviousness, wherein the application software roles define a group of services (column 3, lines 57-61; where the SCOs administer the application software which have varying roles. These varying roles correspond to a variety of services.).

As per claim 38, Spencer teaches the method of claim 9, but does not specifically teach the use of application roles compatibility requirements as software roles compatibility requirements. It would have been obvious to one of ordinary skill in the art to include this limitation. The relationship between application roles and software roles is discussed in the discussion of claim 36. For the invention to have any utility, compatibility requirements of software roles and application roles must match, since applications are part of the overall software. It is thus obvious and necessary to include application roles compatibility requirements in software roles compatibility requirements.

As per claim 39, Spencer teaches the method of claim 38 on the basis of obviousness, wherein the application roles compatibility requirements define a group of services (column 3, lines 57-61; where the SCOs administer the application software, each with certain compatibility requirements. These applications correspond to various services. For the invention to function, the compatibility requirements must be met, since the applications will govern the use of the group of services, which thus defines the group.).

As per claim 40, Spencer teaches the method of claim 6, but does not specifically teach the characteristic of software packaging parameters relating to a variety of network service tiers.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include this limitation, as the various ISPs (or network service tiers) would ultimately be the entities providing the provisioning services (column 2, lines 60-64). These services would come in the form of software packages. Thus the software parameters must be governed by the specific varieties of network service tiers.

As per claim 41, Spencer teaches the method of claim 7, but does not specifically teach the compatibility requirements being governed by network service tiers. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this limitation, as the various ISPs (or network service tiers) would ultimately be the entities providing the provisioning services (column 2, lines 60-64). Thus, for the invention to function, the network service tiers must be compatible with the rest of the system. Internet services must have compatibility requirements since they ultimately govern the provisioning process.

As per claim 42, Spencer teaches the method of claim 6, but does not specifically teach the use of configuration parameters to define software packaging parameters. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this limitation, as it is well known in the art. Software packaging parameters are specificities of configuration parameters and generally represent a subset of configuration parameters. It would thus be obvious to group them under the category of configuration parameters.

As per claims 43-47, Spencer teaches the method of claim 42 on the basis of obviousness. Claims 43-47 are rejected on the same basis of obviousness of claim 42, as all of the components are well known and obvious subsets of configuration parameters, and it would have been obvious to one of ordinary skill in the art to include these limitations. The motivation for doing so is

because the addition of these components allows for the use of various parameters, thus allowing for system compatibility, efficiency, and utility.

As per claim 48, Spencer teaches the method of claim 47 on the basis of obviousness, but does not specifically teach the use of device role configuration parameters as role configuration parameters. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known. The motivation for doing so lies in the fact that the device characteristics are an integral part of the invention, and it is thus necessary for device role parameters to exist as role configuration parameters, as in the example of compatibility, the invention would not function if the device configuration is incompatible. As a result, there must be parameters for the device configuration in place to account for this.

As per claim 49, Spencer teaches the method of claim 48 on the basis of obviousness, wherein the device role configuration parameters comprise device role history configuration parameters (column 9, lines 9-11, 56-61; where the rollback process depends on a configuration history. This history is part of the device role configuration parameters, since it is possible in certain situations that this configuration will be used.).

As per claim 50, Spencer teaches the method of claim 7, but does not specifically teach the use of configuration compatibility requirements as compatibility requirements. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known in the art. The motivation for doing so lies in the fact that configuration compatibility requirements must match other compatibility requirements for the invention to function properly. Without criteria for proper configuration, there would be no consistency in configuration compatibility,

giving rise to incompatible configurations being loaded. This would lead to the invention's dysfunction and would thus defeat its purpose.

As per claims 51-55, Spencer teaches the method of claim 50 on the basis of obviousness. Claims 51-55 are rejected on the same basis of obviousness of claim 50, as all of the components are well known and obvious subsets of configuration compatibility parameters, and it would have been obvious to one of ordinary skill in the art to include these limitations. The motivation for doing so is because the addition of these components allows for the use of various compatibility parameters, thus allowing for system compatibility, efficiency, and utility, by allowing only those configurations that will function with the system.

As per claim 56, Spencer teaches the method of claim 55 on the basis of obviousness, but does not specifically teach the use of device role configuration compatibility requirements as role configuration compatibility requirements. It would have been obvious to one of ordinary skill in the art to include the device role configuration as a configuration compatibility requirement. The motivation for doing so lies in the fact that the device role is an integral part in the system as a whole, and thus must be consistent with the other compatibility requirements for the invention to function. Criteria of the device's function must be met for the invention to function, and thus a device role configuration compatibility requirement is necessary.

As per claim 57, Spencer teaches the method of claim 56 on the basis of obviousness, wherein the device role configuration compatibility requirements comprise device role history configuration compatibility requirements (column 9, lines 9-11, 56-61; where the rollback process depends on a configuration history. This history is part of the device role configuration parameters, since it is possible in certain situations that this configuration will be used. It is

therefore implied that old device role configuration compatibility requirements are depended upon for any rollback process to be possible.).

As per claim 60, Spencer teaches the method of claim 58 on the basis of obviousness, but does not specifically teach the definition of the access control list by domain name server. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known in the art. The motivation for doing so lies in the fact that access to a server is initialized by the domain name server address. If an unauthorized DNS is attempting to access the provisioning system, the existence of safeguard, in the form of an authorization list to prevent this, is well known in the art.

As per claim 62, Spencer teaches the method of claim 61, but does not specifically teach the limiting of access to the agent by the domain name server address of the network device. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known in the art. The motivation for doing so lies in the fact that access to a server is initialized by the domain name server address. If an unauthorized DNS is attempting to access the provisioning system, the disallowance of this act, based on the DNS address, is well known in the art.

As per claim 63, Spencer teaches the method of claim 9, but does not specifically teach the relation of a network device's IP address to the software roles compatibility requirements. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known in the art. The motivation for doing so lies in the fact that an IP address of a network must be compatible for proper provisioning to take place. Therefore, there must exist criteria to govern whether an IP address is compatible.

As per claim 64, Spencer teaches the method of claim 9, but does not specifically teach the use of IP address compatibility requirements as a component of software roles compatibility requirements. It would have been obvious to one of ordinary skill in the art to include this limitation, as it is well known in the art. The motivation for doing so lies in the fact that a compatible IP address must exist for the invention to function. Therefore, it is necessary to include this criterion in the software's compatibility requirements, as the IP address compatibility is an integral part of the software's compatibility. The inclusion of the limitation gives rise to the proper function of the invention and is thus obvious.

As per claim 65, Spencer teaches the method of claim 1, and identifies configuration parameters to facilitate a rollback procedure (column 9, lines 16-62), but does not specifically teach the specific identification of a VLAN associated with the network device. In view of the necessity of monitoring the configuration of the network components in preparation for a rollback, it is obvious to one of ordinary skill in the art at the time of the invention to specifically include the identification of a VLAN. Doing so would add a characteristic to monitor during a rollback, and therefore the rollback can be performed in a more specific manner, pertaining solely to the VLAN in question. This teaching would allow for more efficiency into the invention of Spencer and therefore would have been obvious to one of ordinary skill in the art at the time of the invention.

Response to Arguments

Applicant's arguments filed on February 25, 2005 have fully been considered.

a. Applicant asserts that the Spencer patent does not teach a determination such that a command can be executed based on parameters read from the database. Examiner respectfully disagrees. In lines 16-62 of column 9, mention of a rollback procedure is made. In this procedure, parameters are read from the database. A determination is made whether any configurations are faulty, i.e. whether to rollback to a state in which the configuration worked properly. Once the determination is made whether the configuration is faulty or not, the SCO acts accordingly. These teachings constitute the determination of an execution of a command, based on received parameters from the database.

b. In light of the amendment in claim 4, a new ground of rejection has been issued to appropriately traverse the amendment and argument.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 571/272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tanim Hossain
Patent Examiner
Art Unit 2145


Valencia Martin-Wallace
SUPERVISORY PATENT EXAMINER